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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/689,623	10/22/2003	So Haeng Cho	8733.939.00	4805
30827	7590	06/15/2005	EXAMINER	
MCKENNA LONG & ALDRIDGE LLP			PARKER, KENNETH	
1900 K STREET, NW			ART UNIT	
WASHINGTON, DC 20006			PAPER NUMBER	
			2871	

DATE MAILED: 06/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/689,623

Applicant(s)

CHO ET AL.

Examiner

Kenneth A. Parker

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 April 2005.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-10 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**Claim 1-3, 5-8 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Noriyama 5825439.**

Noriyam discloses (regarding claims 1 and 6) a liquid crystal display from which a shorting bar has been removed ( disconnection from the shorting bar 211 is discussed in column 9, lines 49-65 )s taken a product by process limitation which cannot be determined and therefore not distinguishing over the reference),

a plurality of data lines X1,X2 (figure 2);

a plurality of gate lines Y1, Y2 (figure 2)

wherein the gate lines cross the data lines to define a plurality of pixel regions (131 and 141 together) ; thin film transistors 131 and pixel electrodes 141 formed at respective pixel regions;

and at least one pad connected with the plurality of gate lines or the plurality of data lines XCP and CCP,

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the pad having at least one edge having grooves therein (figure 3, the sections between the projections 221a, 221b and 221c are grooves).

(claim 6 only) and at least one pad connected with the plurality of gate lines or the plurality of data lines via a link pattern (the inner portion of the pads connect to the lines, so by definition can be construed as a link pattern).

The reference shows regarding 2, 7 the grooves having an upper boundary and a lower boundary, wherein the lower boundary of the grooves are located spaced apart by a predetermined distance from the at least one edge of the pad (either side can be construed as the upper or lower side, and the inner portion of the groove as some distance from what ever is construed as the edge of the pad, so the limitation is met by definition.

The reference shows regarding 3,8 wherein the grooves are formed at the uppermost portion of the pad (any part can be construed as the uppermost part of the pattern).

The reference shows regarding 5, 10 wherein the thin film transistor has an active region made of amorphous silicon (column 4, lines 20-31).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 4, 9 are rejected under 35 U.S.C. 102(b) as anticipated by, or in the alternative under 35 U.S.C. 103(a) as being unpatentable over Noriyama 5825439.**

Lacking from the disclosure regarding 4, 9, the limitation where in the shorting bar has been removed by a scribing wheel passing over the upper boundary of the grooves. This limitation is a product by process limitation, and as product by process limitations are given weight only in so far as they produce a materially different device, this limitation does not distinguish over the reference. It appears that the cutting method would not alter the physical structure.

#### ***Election/Restrictions***

Applicant's election without traverse of group 1 in the reply filed on 4/22/2005 is acknowledged.

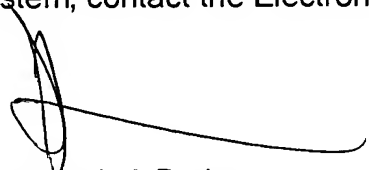
#### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth A. Parker whose telephone number is 571-272-2298. The examiner can normally be reached on M-F 10:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert H. Kim can be reached on 571-272-2293. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Kenneth A Parker  
Primary Examiner  
Art Unit 2871